

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Previously Presented) A method, comprising:

lowering a downhole device having a pump inlet and a fluid agitator via a well bore into fluid of a subsurface cavity formed in a subterranean zone, the fluid agitator comprises a plurality of arms that are outwardly extendable, the fluid agitator operable to be longitudinally adjusted in the subsurface cavity after the plurality of arms are extended;

agitating the fluid using the fluid agitator; and

wherein agitating the fluid comprises rotating the arms at a rate of no more than ten revolutions per day.

2. (Previously Presented) The method of Claim 1, and further comprising removing the fluid from the subsurface cavity using the pump inlet.

3. (Previously Presented) The method of Claim 1, and further comprising removing the fluid from the subsurface cavity through the pump inlet while the fluid is agitated by the fluid agitator.

4. (Canceled)

5. (Canceled)

6. (Previously Presented) The method of Claim 1, wherein agitating the fluid comprises rotating the arms at a rate of no more than five revolutions per day.

Applicant : Joseph A. Zupanick  
Serial No. : 10/687,362  
Filed : October 14, 2003  
Page : 3 of 10

Attorney's Docket No.: 17601-005003 / BB  
067083.0283

7. (Previously Presented) The method of Claim 1, wherein agitating the fluid comprises rotating the arms at a rate of no more than one revolution per day.

8. (Previously Presented) A method comprising:

lowering a downhole device having a pump inlet and a fluid agitator via a well bore into fluid of a subsurface cavity formed in a subterranean zone, the fluid agitator comprises a plurality of arms that are outwardly extendable, the fluid agitator operable to be longitudinally adjusted in the subsurface cavity after the plurality of arms are extended;

agitating the fluid using the fluid agitator; and

wherein the fluid agitator comprises a plurality of blunt arms that are outwardly extendable.

9. (Previously Presented) A method, comprising:  
lowering an inlet of a pump via a well bore into a cavity formed underground, the cavity including fluid and a plurality of particles in the fluid;  
agitating the fluid using a plurality of arms, the inlet of the pump operable to be longitudinally adjusted in the subsurface cavity while agitating the fluid;  
removing the fluid; and  
wherein agitating the fluid comprises rotating the arms at a rate of no more than ten revolutions per day.

10. (Previously Presented) The method of Claim 9, wherein the inlet of the pump is coupled to the plurality of arms that are operable to extend radially within the cavity, and wherein agitating the fluid comprises extending the arms and rotating the arms about a longitudinal axis of the pump.

11. (Canceled)

12. (Original) The method of Claim 10, wherein agitating the fluid comprises rotating the arms at a rate of no more than five revolutions per day.

13. (Original) The method of Claim 10, wherein agitating the fluid comprises rotating the arms at a rate of no more than one revolution per day.

14. (Previously Presented) A method comprising:  
lowering an inlet of a pump via a well bore into a cavity formed underground, the cavity including fluid and a plurality of particles in the fluid;  
agitating the fluid using a plurality of arms, the inlet of the pump operable to be longitudinally adjusted in the subsurface cavity while agitating the fluid;  
removing the fluid; and  
wherein the inlet of the pump is coupled to a plurality of blunt arms that are operable to extend radially within the cavity, and wherein agitating the fluid comprises extending the blunt arms and rotating the blunt arms and rotating the blunt arms about a longitudinal axis of the pump.
15. (Original) The method of Claim 9, wherein the act of removing the fluid is performed while agitating the fluid.
16. (Original) The method of Claim 9, wherein the pump is a suction-rod pump.
17. (Original) The method of Claim 9, wherein the pump is a downhole pump.

18. (Previously Presented) A method for removing particulate laden fluid from a subterranean zone, comprising:

lowering an inlet of a pump through a well bore into a cavity formed in a subterranean zone, the cavity having a transverse dimension greater than a transverse dimension of the well bore;

radially extending within the cavity a plurality of arms coupled to the pump inlet, the pump inlet operable to be longitudinally adjusted in the cavity after extending the plurality of arms;

collecting particulate laden fluid in the cavity;

rotating the arms about a longitudinal axis of the pump;

removing the particulate laden fluid with the pump; and

wherein the arms are rotated at a rate of no more than ten revolutions per day.

19. (Canceled)

20. (Previously Presented) A method comprising:

lowering an inlet of a pump through a well bore into a cavity formed in a subterranean zone, the cavity having a transverse dimension greater than a transverse dimension of the well bore;

radially extending within the cavity a plurality of arms coupled to the pump inlet, the pump inlet operable to be longitudinally adjusted in the cavity after extending the plurality of arms;

collecting particulate laden fluid in the cavity;

rotating the arms about a longitudinal axis of the pump;

removing the particulate laden fluid with the pump; and

wherein each of the arms are blunt.

21. (Previously Presented) The method of Claim 1, wherein the downhole device is positioned in the subsurface cavity via a well bore having a first diameter, and the downhole device is changeable to a diameter that is greater than the first diameter.

22. (Previously Presented) The method of Claim 10, wherein the extended arms exceed a diameter of the well bore.

23. (Previously Presented) The method of Claim 18, wherein the extended arms exceed a diameter of the well bore.

24. (New) A method, comprising:

lowering a downhole device having a pump inlet and a fluid agitator via a well bore into fluid of a subsurface cavity formed in a subterranean zone, the fluid agitator comprises a plurality of arms that are outwardly extendable, the fluid agitator operable to be longitudinally adjusted in the subsurface cavity after the plurality of arms are extended;

agitating the fluid using the fluid agitator; and

wherein agitating the fluid comprises rotating the arms slowly to agitate the liquid in the cavity, thereby suspending debris within the liquid for removal.